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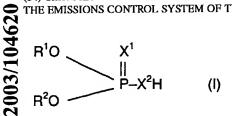
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(54) Title: METHOD OF LUBRICATING AN INTERNAL COMBUSTION ENGINE AND IMPROVING THE EFFICIENCY OF THE EMISSIONS CONTROL SYSTEM OF THE ENGINE



(57) Abstract: Internal combustion engines exhibit improved efficiency of the emissions control system by using a lubricating oil composition of a base oil, an alkali or alkaline earth metal-containing detergent; a metal salt of one or more phosphorus-containing compounds represented by the formula (I), wherein X1 and X<sup>2</sup> are independently O or S, and R<sup>1</sup> and R<sup>2</sup> are independently hydrocarbyl groups, the average total number of carbon atoms in R<sup>1</sup> and R<sup>2</sup> for the one or more phosphorus-containing compounds being at least 10.4; and an acylated nitrogen-

containing compound having at least about 10 alphatic carbon atoms and a TBN of at least about 2; the lubricating oil composition being characterized by a phosphorus concentration of up to about 0.12% by weight and the substantial absence of copper, thereby generating a lean-phosphorus containing exhaust gas.

